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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,948	09/22/2006	Chandrasekaran Margam	7843P009	5445
8791 7590 03/10/2010 BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040				
EXAMINER				
YEAGER, RAYMOND P				
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03/10/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/593,948

Applicant(s)

MARGAM ET AL

Examiner

Raymond P. Yeager

Art Unit

1651

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-7, 24 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-15 and 17-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 01/08/2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

- Claims 1 to 15 and 17 to 25 are pending;
- Claim 16 has been cancelled;
- Claims 1 to 7 and 24 to 25 are withdrawn;
- Claims 8 to 15 and 17 to 23 are under consideration.

Response to Comments

Applicant's arguments filed 01/08/2010 have been fully considered.

REJECTIONS/OBJECTIONS WITHDRAWN

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

• *Objections - Priority*

Applicant's arguments are considered and are persuasive in part. Applicant argues the foreign priority claim is proper as the claim was amended into the specification on 09/22/2006. According to 201.13.II.A: "A priority claim need not be in any special form and may be a statement signed by a registered attorney or agent. A priority claim can be made on filing: (A) by including a copy of an unexecuted or executed oath or declaration specifying a foreign priority claim (see 37 CFR 1.63(c)(2)); or (B) by submitting an application data sheet specifying a foreign priority claim (see 37 CFR 1.76). In claiming priority of a foreign application previously filed under such a treaty, certain information must be supplied to the U.S. Patent and Trademark Office. In addition to the application number and the date of the filing of the application, the following information is required: (A) the name of the treaty under which the application was filed; and (B) the name and location of the national or intergovernmental authority which received such application." As of the 09/08/2009 office action the claim for priority was in neither designated location. This objection is withdrawn with the submission of the 01/08/2010 oath/declaration which includes a proper claim to foreign priority.

- ***Objections – Oath/Declaration***

Applicant's arguments have been fully considered and are persuasive. The objection to the oath/declaration has been withdrawn due to the submission of the 01/08/2010 oath/declaration.

- ***Objections - Drawings***

Applicant's arguments have been fully considered and are persuasive. The objection to the drawings has been withdrawn due to the submission of the 01/08/2010 drawings.

- ***Claim Rejections – 35 USC § 103***

Applicant's arguments have been fully considered and are persuasive due to amendment. The 35 USC § 103 rejection to claims 8 to 11, 13, 15, and 18 to 23 over WO 02/060508 and US Patent 6,149,688 has been withdrawn due to amendment. However, upon further consideration, a new ground(s) of rejection is made in view of WO 02/060508, US Patent 6,149,688, and US Patent 6,063,894 in the 35 USC § 103 section below.

Applicant's arguments have been fully considered and are not persuasive. The 35 USC § 103 rejection to claims 8, 16, and 17 over WO 02/060508, US Patent 6,149,688, and US Patent 6,063,894 has been restated in the 35 USC § 103 section below..

- Applicant's arguments have been fully considered and are persuasive due to amendment. The 35 USC § 103 rejection to claims 8, 13, and 14 over WO 02/060508, US Patent 6,149,688, and US patent application publication 2004/0258732 has been withdrawn due to amendment. However, upon further consideration, a new ground(s) of rejection is made in view of WO 02/060508, US Patent 6,149,688, US Patent 6,063,894, US patent application publication 2004/0258732, and US Patent 6,712,845 in the 35 USC § 103 section below.

- Applicant's arguments have been fully considered and are persuasive due to amendment. The 35 USC § 103 rejection to claims 8 and 12 over WO 02/060508, US Patent 6,149,688, and US Patent 6,712,845 has been withdrawn due to amendment. . However, upon further consideration, a new ground(s) of rejection is made in view of WO 02/060508, US Patent 6,149,688, US Patent 6,063,894, US patent application publication 2004/0258732, and US Patent 6,712,845 in the 35 USC § 103 section below.

NEW GROUNDS OF REJECTION NECESSITATED BY AMENDMENT

Rejections and/or objections not reiterated from previous office Actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections – 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following rejection under 35 USC § 102 is necessitated by amendment which resulted in a new search which yielded prior art not discovered in the search for the 06/05/2009 claims (see Amended Google Search attached).

- Claims 8, 9, 11, 15, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent application publication 2002/0142413 (Publication date: 10/03/2002), hereafter referred to as the '413 publication.

Applicant claims a method of mixing two polymers, forming a scaffold, and leaching a polymer wherein leaching with a solvent is maximized at the surface resulting in greater porosity at the surface than the core. The polymers natural and/or synthetic are biodegradable wherein the leached polymer is more biodegradable.

The '413 publication teaches a method for manufacturing a two polymer scaffold for tissue engineering by blending two polymers, forming the scaffold in a mould, and leaching the sacrificial polymer in an ultrasonic bath, with the other polymer inert to the solvent (pages 8-9, example A). Though the instant claims recite "wherein leaching of the first polymer is controlled so that removal of the first polymer occurs to a greater extent at a surface of the scaffold, and to a lesser extent at a core of the scaffold" this type of leaching is considered inherent per standard physical chemistry as a solvent would require more time to diffuse to the center and have less access to the polymer being dissolved at the core than the polymer being dissolved at the surface.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 8 to 11, 13, 15 and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/060508 (Publication date: 08/08/2002; as provided by the applicant on the 06/05/2009 IDS), hereafter referred to as the '508 publication, in view of US patent 6,149,688 (Publication date: 11/21/2000; as provided in the 09/08/2009 office action), hereafter referred to as the '688 patent, and US Patent 6,063,894 (Publication date: 05/16/2000; as provided in the 09/08/2009 office action), hereafter referred to as the '894 patent.

Rejection Stated

Applicant claims a method of mixing two polymers (60:40 to 30:70 ratio), forming a scaffold, and leaching a polymer wherein leaching with a solvent is maximized at the surface resulting in greater porosity at the surface than the core. The polymers natural and/or synthetic are biodegradable wherein the leached polymer is more biodegradable. Polymers are blended and milled in a cryogenic mill (15-30 cycles/min, 15 impacts/sec, 20-500tim) then compressed and molded, and remove a polymer by leaching in an ultrasonic bath (1-40 KHz, 5-120 min, and 25-50°C).

The '508 publication teaches a method of preparing a porous scaffold for use in tissue engineering ('508 abstract) wherein at least two polymers are blended in a low temperature mill ('508, page 6, lines 24-25) to a size of 10-1000tim, the scaffold is formed under pressure ('508, page 9, lines 3-5), and a solvent is used to dissolve the soluble particle ('508 page 16-20) (i.e. leaching) wherein the soluble particles comprise a polymer, PMMA ('508, page 14, claims 3 and 7) that will dissolve without affecting the copolymer ('508, page 9, claims 17-20) and thus at least two of the polymers have a different biodegradability (limitations in instant claims 8, 9, 11, 13, 15, 18, and 23). The '508 publication discloses a polymer ratio of 60:40 to 30:70 (limitations in instant claim 10) of aromatic polyesters and polyalkylene glycol terephthalate and polybutylene terephthalate ('508, page 4, lines 1-6; page 5, lines 13-17; and page 6, lines 1-3) (limitations in instant claims 10 and 11). As the '508 publication discloses the same particle size as the particle size in the instant application, it would be obvious to one of ordinary skill in the art to adjust the settings to optimize the particle size (limitations in instant claims 19 to 21). Though the instant claims recite "wherein leaching of the first polymer is controlled so that removal of the first polymer occurs to a greater extent at a surface of the scaffold, and to a lesser extent at a core of the scaffold" this type of leaching is considered inherent per standard physical chemistry as a solvent would require more time to diffuse to the center and have less access to the polymer being dissolved at the core than the polymer being dissolved at the surface.

The difference between the instant application and the '508 publication is that the '508 publication does not expressly teach a porosity gradient which increases from the

core to the surface or the use of an ultrasonic bath. This deficiency in the '508 publication is cured by the teachings of the '688 patent and the '894 patent. The '688 patent teaches a bone implant with a porosity gradient with a dense core and a porous surface form by the removal of a binder ('688, column 4, lines 47-57) (limitations in claim 8 and 22). The '894 patent teaches the extraction of a soluble compound ('894, column 4, lines 19-27) at 15 to 100 KHz ('894, column 6, lines 34-37) and a temperature of 35 - 180°C ('894, column 18, claim 19). These ranges overlap and make obvious the instantly claimed ranges (instant claims 16 and 17). Further, the '894 patent provides a working example wherein the ultrasound was performed for 60 minutes ('894, column 16, example 11).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to provide a two polymers in a copolymers form and provide sacrificial polymer to form pores from particulates by cryogenic milling, compression and molding, and leaching the sacrificial polymer as taught by the '508 publication and provide a porosity gradient as taught in the '688 patent, and leach the sacrificial polymer in an ultrasonic bath as taught in the '894 patent. One of ordinary skill in the art would have been motivated to do this because the '508 publication teaches that by "varying the amount and/or dimensions of either the polymer powder or the soluble particles, the pore-size, porosity, and/or amount of interconnected pores can be controlled in a manner that has not been previously disclosed ('508, page 3, lines 19-24)", the '688 patent provides an implant with a porosity which allows bone tissue ingrowth for repair ('688, column 2, lines 44-48 and column 4, lines 57-58) and the '894 patent teaches the enhancement of mechanical properties of the polymer by leaching compounds in an ultrasonic bath ('894, column 4, lines 19-27). In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a). From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was prima facie obvious to one of ordinary skill in the art at the

time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant argues the '508 publication and the '688 patent do not teach the use of an ultrasonic bath. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The combination of the '508 publication, the '688 patent, and the '894 patent teach the method of forming a porous implant with two polymers by leaching in an ultrasonic bath. As recited above, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to provide a two polymers in a copolymers form and provide sacrificial polymer to form pores from particulates by cryogenic milling, compression and molding, and leaching the sacrificial polymer as taught by the '508 publication and provide a porosity gradient as taught in the '688 patent, and leach the sacrificial polymer in an ultrasonic bath as taught in the '894 patent because the '508 publication teaches that by "varying the amount and/or dimensions of either the polymer powder or the soluble particles, the pore-size, porosity, and/or amount of interconnected pores can be controlled in a manner that has not been previously disclosed", the '688 patent provides an implant with a porosity which allows bone tissue ingrowth for repair ('688, column 2, lines 44-48 and column 4, lines 57-58) and the '894 patent teaches the enhancement of mechanical properties of the polymer by leaching compounds in an ultrasonic bath ('894, column 4, lines 19-27).

Applicant argues the in the instant claims the leaching removes polymers to a greater extent at the surface than at the core. As noted *supra*, though the instant claims recite "wherein leaching of the first polymer is controlled so that removal of the first polymer occurs to a greater extent at a surface of the scaffold, and to a lesser extent at a core of the scaffold" this type of leaching is considered inherent per standard physical chemistry as a solvent would require more time to diffuse to the center and have less access to the polymer being dissolved than that at the surface.

The MPEP § 2141.02. VI. notes "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." [*In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). >See also MPEP § 2123.] Applicant argues the '508 publication teaches away from a pore structure with a gradient by teaching a porous body with homogeneous distributed pores and teaches removal of all soluble particles. Applicant refers to page 2, lines 22 to 24 of the '508 publication but this segment is directed to a preferred embodiment and pages 9, 21 to 23 refer to complete removal but this describes but is not limited to an embodiment as noted at the beginning of the sentence, "Generally, it will be desired". Lastly, as noted above, the '508 publication teaches that by "varying the amount and/or dimensions of either the polymer powder or the soluble particles, the pore-size, porosity, and/or amount of interconnected pores can be controlled in a manner that has not been previously disclosed". Applicant argues the '688 patent does not teach leaching of the polymers and teaches control over pore size is difficult but again this is arguing the references independently when the obviousness rejection relies on the combination of references above.

In response to applicant's argument that the '688 patent teaches sintering and not leaching and is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the '688 patent is drawn to a porous artificial bone graft to allow bone ingrowth (i.e. tissue regeneration and bone growth) wherein the graft comprises a porosity gradient with a dense core and a porous surface form by the removal of a binder.

Applicant argues the '894 patent does not teach controlled leaching of a polymer. Again, the applicant argues the references individually when the obviousness rejection is based on a combination of references. The '894 patent provides that it would be obvious for one of ordinary skill in the art to leach polymers in an ultrasonic bath.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Applicant argues the combination of the '508 publication, the '688 patent, and the '894 patent uses improper hindsight reasoning. Applicant further argues claim 22 requires leaching which results in a graded porosity with a higher porosity at the surface. As noted above, the '688 patent provides the motivation for a porosity gradient in bone implants and the '508 publication provides for a versatile method of preparing a porous implant.

- Claims 8 to 15 and 17 to 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/060508 (Publication date: 08/08/2002; as provided by the applicant on the 06/05/2009 IDS), hereafter referred to as the '508 publication, in view of US patent 6,149,688 (Publication date: 11/21/2000; as provided in the 09/08/2009 office action), hereafter referred to as the '688 patent, and US Patent 6,063,894 (Publication date: 05/16/2000; as provided in the 09/08/2009 office action), hereafter referred to as the '894 patent as in claims 8 to 11, 13, and 15 to 23 above and further in view of US patent application publication 2004/0258732 (Publication date: 12/23/2004; Filing date: 11/20/2002; as provided in the 09/08/2009 office action), hereafter referred to as the '732 publication and US Patent 6,712,845 (Publication date: 03/30/2004; Filing date: 04/24/2001; as provided in the 09/08/2009 office action), hereafter referred to as the '845 publication.

Rejection Stated

As discussed *supra*, the applicant claims a method of mixing two natural and/or synthetic polymers by forming a scaffold, and leaching a polymer wherein leaching with a solvent is maximized at the surface resulting in greater porosity at the surface than the

core. Polymers are blended and milled in a cryogenic mill then compression molded (0-20 MPa and 25- 80°C), and a polymer is removed by dissolution.

The combination of the '508 publication, the '688 patent, and the '894 patent teaches a method of preparing a porous scaffold for use in tissue engineering wherein at least two polymers are blended in a cryogenic mill, the scaffold is formed under pressure, and a solvent is used to dissolve the soluble polymer in an ultrasonic bath such that a porosity gradient forms with greatest porosity at the surface. Further, the '688 patent teaches a pressure of 6.9 to 14.8 MPa is used to consolidate powder to make a bone implant ('688, column 4, lines 28-31).

The '508 publication, the '688 patent, and the '894 patent does not expressly provide an embodiment comprising all the limitations of the compression molding or the specific solvents used to leach the sacrificial polymer. This deficiency in the combination of the '508 publication, the '688 patent, and the '894 patent is cured by the teachings of the '732 publication and the '845 patent. The '732 publication teaches a porous, copolymeric implant material comprising a porous block copolymer ('732, page 4, paragraph 22) formed by compression molding at about 70°C ('732, page 5, paragraph 50) and a compression strength of approximately 1MPa to 5 MPa ('732, page 6, paragraph 58). The '845 patent teaches the removal of one polymer from a coating comprising at least two polymers and provides an embodiment where the process may be repeated ('845, column 8, line 49 to column 9, line 40) using solvents such as acetone, chloroform, and other ('845, column 3, lines 44-55) (limitation in claim 12).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to cryogenically mill, compress, and leach a sacrificial polymer from a composition in an ultrasonic bath with at least two polymers as taught by the combination of the '508 publication, the '688 patent, and the '894 patent and to compression mold with the parameters as taught in the '732 patent and leach the sacrificial polymer with the solvents taught in the '845 patent. One of ordinary skill in the art would have been motivated to do this because the '732 patent discloses a porous polymeric material used for bone tissue regeneration or artificial cartilage and various other clinical applications ('732, page 4, paragraphs 22, 23, and 30) and also discloses

compression molding can be used to control the pore size in a structure ('732, page 7, paragraph 61) and the '845 patent provides a method of using solvents to remove a polymer from a copolymeric surface ('894, column 2, lines 8-14 and column 5, lines 17-22). Thus one of ordinary skill in the art would understand that compression molding is well-known in the art and has been used to control the porosity of moldable structures and the method of using a solvent to leach a polymer from a copolymer would be known to one of ordinary skill in the art. In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a). From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant argues the '732 publication and the '845 publication do not remedy the deficiencies discussed *supra* (i.e. controlled leaching of polymers greater at the surface while in an ultrasonic bath). As noted *supra*, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Further, as noted above, one of ordinary skill in the art would understand that compression molding is well-known in the art and has been used to control the porosity of moldable structures and the method of using a solvent to leach a polymer from a copolymer would be known to one of ordinary skill in the art.

Conclusion

All claims are rejected; no claims are allowed.

THIS ACTION IS MADE FINAL AS NECESSITATED BY AMENDMENT.

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAYMOND P. YEAGER whose telephone number is (571) 270-7681. The examiner can normally be reached on Mon - Thurs 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

R.P.Y.

/Bennett Celsa/
Primary Examiner